Detroit Institute of Cancer Research

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May 18, 1954

Dr. Joshua Lederberg
The University of Wisconsin
College of Agriculture
Department of Genetics
Madison 6, Wisconsin

Dear Josh:

I'm sending four paragons of the following genotypes:

108.3	a	Pa	Ad	th	bi	py	me	g	Ma		
168.4	α	pa	Ad	Th/th	bi	py	Me/me	g	Ma		
153.4	α	Pa	ad	Th/th	bi	py		g	ma		
50.2	a	Pa	Ad	Th	bi	py	Me	G			

The designations refer to mating type, pantothenate, adenine, thiamin, biotin, pyridoxine, melibiose, galactose and maltose. All of these cultures grow well in synthetic medium supplemented only with the growth factors indicated above. Thiamineless is not a satisfactory marker, but pantothenate and adenine are good. I've included the pink adenineless stock thinking that the color might be convenient. Some of these segregants were not tested for characters which were heterozygous in the cross, e.g. 168.4 for melibiose and thiamin. I have pedigrees for each of these stocks back to the original parents which came from the Lindegrens. As you know, their stocks are primarily S. cerevisiae into which various fermentative characters were introduced by crosses with other species, e.g. melibiose fermentation was introduced from S. carlesbergensis.

These cultures have been selected on the basis of genotype and non-clumping. We have generally had no difficulty with illegitimate diploidization or with lack of cross-fertility or poor growth. There is some variation in the intensity of the cytochrome bands among our cultures, but we do not have quantitative data on oxidative capacity on very many cultures. I gave preference to non-clumping in selecting these because I thought this would be most important in your work.

Thanks for calling my attention to the Laskowski paper. Ephrussi told me it was coming out, but I had not seen it.

With regards to you and Esther.

Sincerely,

Caroline

Caroline Raut
Research Associate

CR:mv